Neth Heart J (2014) 22:569–570
DOI 10.1007/s12471-014-0615-z

RHYTHM PUZZLE - QUESTION

A rare case of narrow QRS complex tachycardia

L. E. Swart · Y. S. Tuininga

Published online: 12 November 2014

We present the case of a 63-year-old female patient who, 2 months earlier, had been diagnosed with a severe ischaemic cardiomyopathy (left ventricular ejection fraction of 18 % on cardiac MRI) due to a large semi-recent transmural left anterior descending artery infarction. She was referred to our coronary care unit because her physical condition had been declining rapidly over the previous 2 days, with her main complaint being dyspnoea on the slightest physical exertion (NYHA III). She experienced no dyspnoea at rest, nor orthopnoea, chest pain or palpitations. On admission she had a regular pulse of just over 150 beats/min, a blood pressure of 100/60 mmHg, an SpO2 of 100 % and there were no physical signs of congestive heart failure. The ECG at presentation is shown in Fig. 1. What is your most likely diagnosis?

Intravenous adenosine bolus of up to 18 mg did not have any effect on the rhythm and her vital signs remained unchanged. A few minutes later, and 5 min thereafter, a second and third ECG were obtained (Fig. 2). Do these change your diagnosis?

You will find the answer elsewhere in this issue.

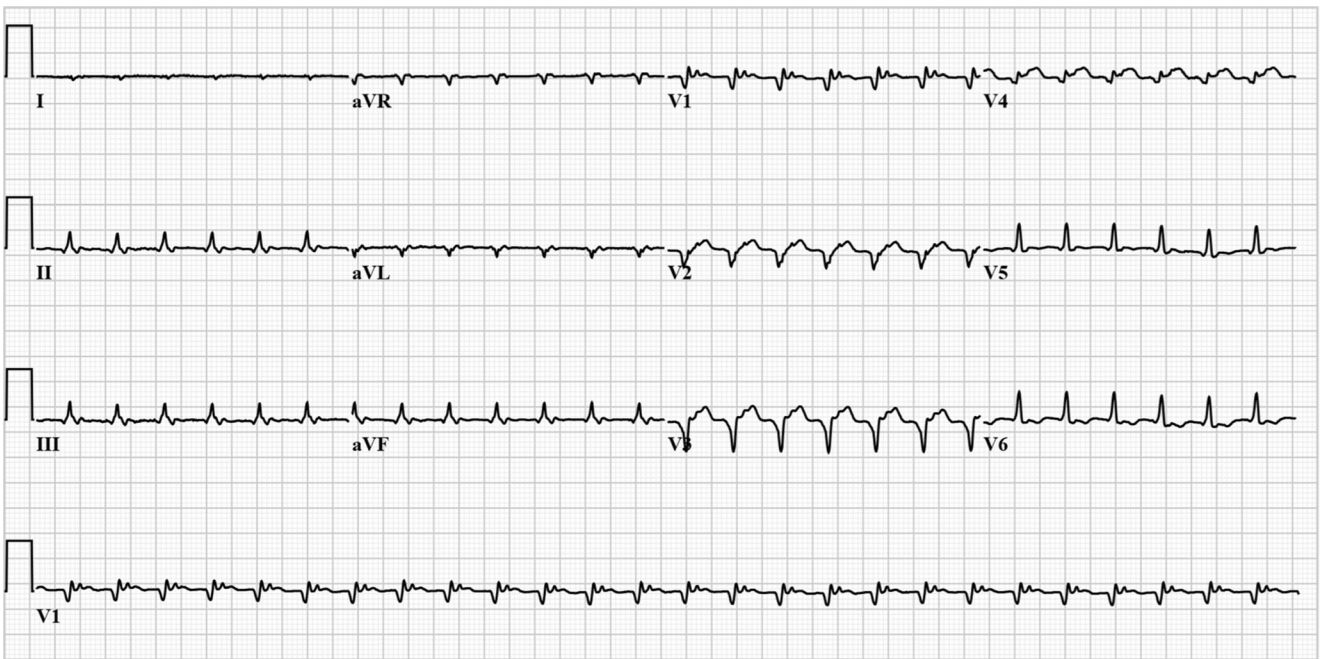

Fig. 1 First standard 12-lead ECG at presentation. Ventricular rate: 160 bpm, QRS duration (calculated): 106 ms

L. E. Swart (✉) · Y. S. Tuininga
Department of Cardiology, Deventer Hospital, Nico Bolkesteinlaan 75, 7416 SE Deventer, the Netherlands
e-mail: laurens.swart@gmail.com

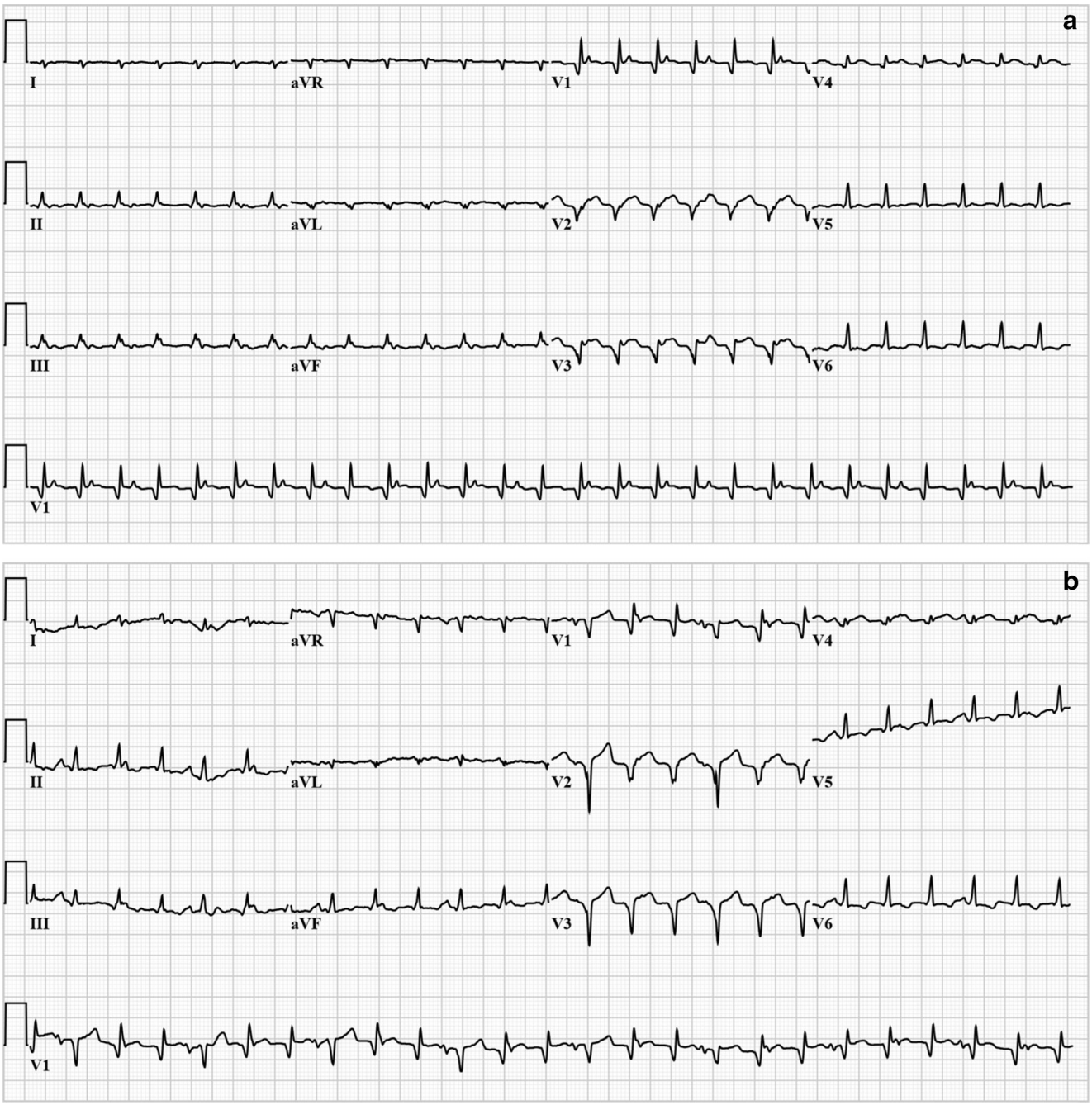

Fig. 2 **a** Second standard 12-lead ECG, a few minutes after adenosine infusion, and the **b** third standard 12-lead ECG, shortly thereafter